

ABSTRACT

Method of modulation and demodulation of a digital signal, in particular in a frequency band affected by flat fading, associated modulator and demodulator

Broadcasting on the FM band presents a major drawback in respect of digital transmission by virtue of a propagation problem called spatial fading or flat fading.

The invention proposes a method of modulating a digital signal of width L in frequency on a given useful frequency band characterized in that it comprises the following steps:

- a separation of the digital signal into N blocks b_n ($1 \leq n \leq N$),
- a splitting of the given useful frequency band into N contiguous parts P_n ,
- a definition of channels C_n , of width l_n in frequency, lying within an associated part P_n , the channels C_n being separated,
- a distributing of each block of digital signals b_n over the associated channel C_n .

[Figure 1]